

**4<sup>th</sup> INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN MATERIAL CHEMISTRY  
(ICRAMC-2020)**

**19-21 February 2020**

**Organized by**

**Department of Chemistry, SRM IST, Kattankulathur-603203, India.**

**In Association with**

**Alternative Energies and Atomic Energy Commission (CEA), France &  
Université Paris-Est Marne-la-Vallée, France**



The 4<sup>th</sup> International Conference on Recent Advances in Material Chemistry (ICRAMC - 2020) organized by **Department of Chemistry**, SRM Institute of Science and Technology, Kattankulathur was held at Dr. T. P. Ganesan Auditorium (Mini Hall-1) in association with **Alternative Energies and Atomic Energy Commission (CEA) and University Paris-Est Marne-la-Vallée**, Paris, France sponsored by **DST-SERB and CSIR, India** commenced with the invocation. The Chief Guest of the conference **Prof. S. Natarajan**, Indian Institute of Science, Bangalore, inaugurated the conference and released the proceedings.



The inaugural function was held on 19<sup>th</sup> Feb. 2020 at Dr. T.P. Ganesan Auditorium, Mini Hall 1, SRMIST, Kattankulathur. The Chief Guest **Prof. S. Natarajan**, Indian Institute of Science, Bangalore, India inaugurated the conference and released the proceedings, **Prof. C. Muthamizhchelvan**, Director (E & T), SRMIST presided over the conference. **Dr. D. John Thiruvadigal**, Dean of Sciences felicitated the Invited Speakers. **Dr. M. Arthanareeswari**, Convenor ICRAMC 2020 welcomed the delegates. **Dr. K. Ananathanarayanan**, Coordinator ICRAMC 2020 introduced the chief Guest and **Dr. S. M. Mahalingam**, Associate Professor, SRMIST delivered the vote of thanks.

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The chief guest **Prof. S. Natarajan**, outlined the importance of chemistry in the development of materials and technology. He highlighted the key material discoveries such as superconductors, new forms of carbons, nanomaterials, Li ion batteries and more. He stressed the recent challenges in the chemistry of materials and suggested the younger researchers to take up those issues towards the betterment of societal needs.

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**Prof. C. Muthamizhchelvan** gave the presidential address. He highlighted the journey of SRMIST since its inception and presented the achievements of SRMIST including Chemistry Department towards teaching and research. He mentioned the conference would provide the platform to share wonderful ideas and wished the conference a grand success. He highlighted the contributions of chemistry in the fields of solar cells and clean environment.

In the special address French dignitaries & the Guests of Honor, **Prof. Nicolas Tsapis**, **Dr. Eric Doris** and **Dr Alberto Bianco**, mentioned the various scientific initiatives and achievements made through Indo-French collaborations. They also highlighted the importance and achievements made through the collaboration between SRMIST and Alternative and Atomic Energy Commission CEA, France & University Paris-Est Marne-la-Vallée, Paris, France.

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Release of Proceedings of ICRAMC-2020 (From left to right): Dr. K. Anathanarayanan, Dr. M. Arthanareeswari (Convenor ICRAMC 2020), Dr. Grégory Pieters, Prof. Nicolas Tsapis, Prof. Jean-Yves Saillard, Prof. C. Muthamizhchelvan, Director (E & T), Prof. S. Natarajan, Dr. Eric Doris, Dr Alberto Bianco, Dr. D. John Thiruvadigal, Dean (Sciences), Prof. Rajadurai Chandrasekar, Dr. Laurent Devel and Dr. S. M. Mahalingam.

More than 300 technical papers were presented in 10 sessions and the presented papers will be submitted as full manuscripts for possible publication in journal – **Materials Today: Proceedings**. The participants from various countries such as France, USA, South Korea, etc., have contributed for these technical papers that will be presented during the conference. This conference addressed the recent research advancements in the field of Materials Chemistry and the innovative strategies for the development of novel materials for the global requirement.

The first day of the conference had four sessions with four invited talks related to use of coordination chemistry in developing new inorganic pigments by **Prof. S. Natarajan**, Professor, SSCU, IISc, India and Some chemistry using nanohybrid catalysts for organic reactions by **Dr. Eric Doris**, Research Director, CEA, France

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and Spray-drying pharmaceuticals for optimal delivery to the lungs: from drying droplets to in vivo evaluation by **Dr. Nicolas Tsapis**, CNRS Research Director, CNRS, France followed by Spinning and shuttling photons in molecular solids by **Dr. Rajadurai Chandrasekar**, Chemistry Department, University of Hyderabad. Also, 15 short oral presentations and poster session successfully took place.



**Dr.Eric Doris delivers his talk at ICRAMC 2020**

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**Dr.Nicolas Tsapis presents his talk at ICRAMC 2020**



**Prof.R.Chandrasekar during his talk at ICRAMC 2020**

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The second day of the conference had three sessions with three invited talks related to structure property correlation studies of inorganic energetic oxidizers under pressure from first principles theory by **Prof. G. S. Vaitheeswaran**, Advanced Centre of Research in High Energy Materials, University of Hyderabad and Multifunctional Graphene Materials by **Dr. Alberto Bianco**, Research Director, CNRS, University of Strasbourg, France followed by New generation of activity-based probes targeting Metalloproteinases by **Dr. Laurent Devel**, Head of Proteins Chemical Labeling team, CEA, France. The second day also had 12 short oral presentations.



**Dr.G.Vaitheeswaran delivers his talk at ICRAMC 2020**

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**Dr. Alberto Bianco presents his invited lecture at ICRAMC 2020**



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**Dr.Laurent Devel during his invited talk at ICRAMC 2020**

The third day of the conference had three sessions with three invited talks on electronic structure of ligated transition-metal superatoms and their assemblies by **Prof. Jean-Yves Saillard**, Université de Rennes 1, France, and surface modification of Mg towards the development of absorbable implants by **Dr. T.S.N. Sankara Narayanan**, Ulsan National Institute of Science and Technology, Republic of Korea followed by metal-carbon covalent bonds stabilized transition metal nanoparticles as efficient and reusable catalysts by **Prof. G. Sekar**, Indian Institute of Technology, Madras and the last invited talk on hydrogen isotope exchanges catalyzed using nanocatalysts by **Dr. Gregory Pieters**, Group leader and Research Scientist, CEA, France. Also, 8 short oral presentations and poster session successfully took place.

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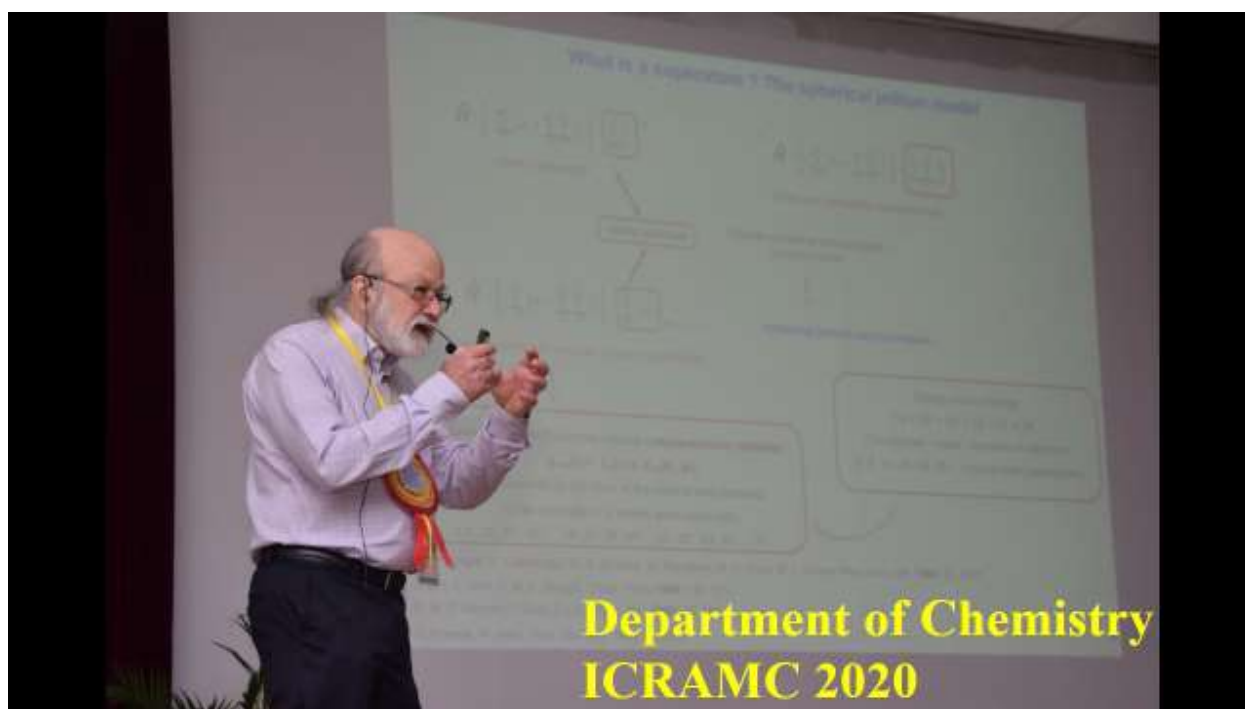
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**Prof. Jean-Yves Saillard delivers his talk at ICRAMC 2020**



**Prof. G. Sekar presents his talk at ICRAMC 2020**

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**Dr. Gregory Pieters, during his invited lecture at ICRAMC 2020**

The conference had totally 11 invited talks, 35 oral presentations and 160 poster presentations.



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During the valedictory of ICRAMC 2020 on 21.2.2020 at 3.30 pm, **Dr. KKR Datta** presented the conference report. Four best oral and poster presentations were awarded and the certificates for the participants were distributed. **Dr.D.John Thiruvadigal**, Dean (Sciences) graced the occasion with his august presence and distributed the best presentation awards. During their feedback, the participants and the speakers admired the organization of conference in a very scientific way and appreciated the hospitality.

**Dr.Vengadesh Kumara Mangalam** delivered the vote of thanks and the session was compered by **Dr.T.Pushpamalini**.

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**Prize winners in oral and poster presentation – ICRAMC -2020**

**Best Oral presentation**

**1. Ms. Gayatri Joshi, IIT Gandhinagar, Gujarat**

Title: Plasmonic Gold nanoprism Cobalt molecular dyad mimics photosystem-II for Visible –NR illuminated neutral water oxidation

**2. Dr. Dinesh Dhumal, Aix-Marseille Universite, CNRS, France**

Title: Ionizable amphillic dendrimers for biomedical application

**3. Ms. Shibin Thundiyil, Catalysis and Inorganic Division, CSIR-NCL, Pune**

Title: Transition metal doped novel silicon based materials: Correlation of structure and high temperature conductivity.

**4. Ms. Snowy Josphin Viola, Dept. of Chemistry, SRMIST- Kattankulathur.**

Title: Identification and quantification of microplastics in environmental and food samples

**Best poster presentation**

**1. Ms. Seema .R. Ghorde, CSIR-NCL, Pune**

Title: Scale up of Pervoskite material: An efficient catalyst for dry reforming of methane

**2. Mr. Rajeev Kishore Poonia, Dept. of Computational Sciences, Central University of Punjab, Bathinda**

Title: Modeling of catalyst for water splitting

**3. Mr. Subramanian Sivagnanam, Dept. of Chemistry, SRMIST, Kattankulathur**

Title: Design and synthesis of dipeptide based self-assembled nanoparticles as an optical probe for fluorescent imaging and target specific drug

**4. Mr. Nitesh Govind Joshi, Dept. of Chemistry, SRMIST, Kattankulathur**

Title: Non-thermal plasma assisted CO<sub>2</sub> conversion to methane over Ni-Cu-Fe catalyst

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**Dr. Dinesh Dhumal, Aix-Marseille Universite, CNRS, France receives the best oral presentation award.**



**Ms. Snowy Josphin Viola, II year B.Sc. Chemistry, SRMIST Kattankulathur receives best oral presentation award.**

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**Mr. Rajeev Kishore Poonia, Dept. of Computational Sciences, Central University of Punjab, Bathinda receives best poster presentation award.**

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**Mr. Subramanian Sivagnanam, Dept. of Chemistry, SRMIST, Kattankulathur receives best poster presentation award**



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**. Mr. Nitesh Govind Joshi, Dept. of Chemistry, SRMIST, Kattankulathur receives best poster presentation award**

ICRAMC-2020 attracted scientists, researchers, and students across the world. Also, this conference provided a good opportunity to share the innovative ideas and scientific results in the field of Material Chemistry among the researchers, academicians, industry people and students. Invited talks, oral presentations and poster presentation by the faculty members and research scholars opened a new way to the research on materials chemistry.

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**During the visit to Kanchipuram Temples on 20.2.2020 AN.**

**Dr. M. ARTHANAREESWARI  
CONVENOR - ICRAMC 2020**